

## CLAIMS

What is claimed is:

*S1b2*

1. In a computer network having a host computer and at least one other computer in communication with said host computer, a method of implementing a virtual network interface between a first software application having a virtual network identity, residing on said host computer, and a second software application, residing on the other computer, attempting to establish a connection with said first application, comprising the steps of:

- 5 (a) assigning a virtual IP address and virtual hostname that are unique to a first application while the first application is running;
- 10 (b) said first application requesting to connect to a port on a host computer using a known port and a wildcard address;
- 15 (c) using the virtual IP address as a local address to connect the first application to said port;
- (d) resolving a request from said second process to connect to said first application by resolving said virtual hostname to said local address; and
- 20 (e) connecting said second application to said first application using said local address.

2. The process of claim 1, wherein said step of resolving a request from said second process to connect to said first application by resolving said virtual hostname to said local address comprises the step of said second application supplying said virtual hostname to a module that maintains associations between virtual hostnames and virtual addresses, and returning the virtual address to said second application.

25 3. In a computer network having a host computer and at least one other computer in communication with said host computer, a method of implementing a virtual network interface between a first software application having a virtual network identity, residing on said host computer, attempting to establish a connection with a second software application, residing on the other computer, comprising the steps of:

- 30 (a) assigning a virtual IP address and virtual hostname that are unique to a first application while the first application is running;

(b) said first application requesting to connect to a port and address of the second computer to which the second application is connected; and

(c) resolving the virtual IP address of the first application as a local address to connect the first application to said second application.

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4. A computer program product, which when executed on a computer in a computer network having a host computer and at least one other computer in communication with said host computer, a method of implementing a virtual network interface between a first software application having a virtual network identity, residing on said host computer, and a second software application, residing on the other computer, attempting to establish a connection with said first application, executes the steps of:

(a) assigning a virtual IP address and virtual hostname that are unique to a first application while the first application is running;

(b) processing a request from said first application to connect to a port on a host computer using a known port and a wildcard address;

(c) using the virtual IP address as a local address to connect the first application to said port;

(d) resolving a request from said second process to connect to said first application by resolving said virtual hostname to said local address; and

(e) connecting said second application to said first application using said local address.

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5. A computer program product, which when executed on a computer in a computer network having a host computer and at least one other computer in communication with said host computer, a method of implementing a virtual network interface between a first software application having a virtual network identity, residing on said host computer, attempting to establish a connection with a second software application, residing on the other computer, executes the steps of:

(a) assigning a virtual IP address and virtual hostname that are unique to a first application while the first application is running;

30 (b) processing a request from said first application to connect to a port and address of the

second computer to which the second application is connected; and

- (c) resolving the virtual IP address of the first application as a local address to connect the first application to said second application.